

**REMARKS**

**Status of the Claims**

Claims 1-14 are pending in this application. No claims have been canceled or added. Claim 1 has been amended to recite that the photothermographic material comprises both a compound satisfying item (iv) and at least one of items (i), (ii) or (iii) in combination. Support for this amendment is found in the specification at page 151, Table 14. Applicants submit that no new matter has been introduced by the above claim amendments.

**Rejection under 35 USC 103(a)**

The Examiner rejects claims 1-14 as obvious over either Ito et al. USP 6,150,084 (Ito '084) or JP 11-149136 (JP '136) in view of Adin et al USP 6,054,260 (Adin '260). Applicants traverse the rejection and respectfully request the withdrawal thereof.

The present invention is directed to a photothermographic material comprising non-photosensitive silver salt of an organic acid, photosensitive silver halide, a reducing agent and a binder all on one surface of a support. The material also comprises at least one compound as defined by formula I and the combination of at least one compound satisfying both (iv) and at least one of (i), (ii) or (iii). The present invention has low fog, high Dmax, high sensitivity, high contrast and excellent storage stability. The present invention is able to maintain little fog even after long term storage after development.

The primary references, Ito '084 and JP '136 fail to disclose the use of a compound as defined by formula I in the present invention. Moreover, neither Ito '084 nor JP '136 discloses or suggests using a compound that satisfies item (iv) in combination with a compound that satisfies one of items (i) to (iii) as recited in the present invention.

Adin '260 discloses a compound of formula I; however, Adin '260 fails to disclose or suggest also using a compound that satisfies item (iv) in combination with a compound that satisfies one of items (i) to (iii) as recited in the present invention. Adin '260 also fails to disclose or suggest that storage stability after development of the film can be obtained by using the claimed combination of compounds.

As such, Applicants submit that the combination of references fails to disclose or suggest all the claim limitations of the present invention. Thus, the Examiner has failed to make a prima facie case of obviousness and the rejection should be withdrawn.

However, assuming *arguendo* that a prima facie case of obviousness has been made, Applicants submit that the present invention yields unexpected superior results over the combination of references. In the specification in Table 14, the present invention is compared to prior art materials which do not use the claimed combination of compounds. The comparative example X-2 is the same as compound 54a in Ito '084 at column 53. It is clear

from Table 14 that the present invention has superior properties over the comparative examples. See in particular the fog data and Dmax data. Please note however, that Example 1-8 in Table 13 is no longer representative of the present invention after the above amendments.

As such, Applicants submit that the present invention has unexpected superior properties which are secondary indicia of nonobviousness. Therefore, Applicants respectfully request that the rejection be withdrawn.

**Conclusion**

As Applicants have addressed and overcome all rejections in the Office Action, Applicants respectfully request that the rejections be withdrawn and that the claims be allowed.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Kecia Reynolds (Reg. No. 47,021) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

**Attached hereto is a marked-up version of the changes made to the application by this Amendment.**

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees


required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By  #32,001

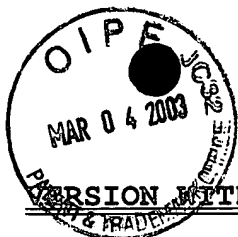
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Attachment: Version with Markings to Show Changes Made

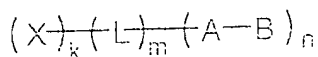
(Rev. 02/20/02)

VERSION WITH MARKINGS TO SHOW CHANGES MADEIN THE CLAIMS:

The claims have been amended as follows:

1. A photothermographic material [~~containing~~] comprising a non-photosensitive silver salt of an organic acid, a photosensitive silver halide, a reducing agent for silver ions and a binder on one surface of a support, which comprises at least one compound represented by the following formula (I) and at least one compound [selected from the following (i), (ii), (iii) and (iv)] satisfying both (iv) and at least one of (i) to (iii):

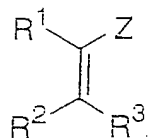
Formula (I)



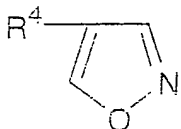
wherein, in the above formula, X represents a silver halide adsorption group or light absorption group which contains at least one atom of N, S, P, Se or Te, L represents a (k + n)-valent bridging group containing at least one atom of C, N, S or O, A represents an electron-donating group, B represents a leaving group or a hydrogen atom, A-B is dissociated or deprotonated after oxidation to generate a radical A', k represents 0-3, m represents 0 or 1, and n represents 1 or 2, provided that when k = 0 and n = 1, m = 0[.];

- (i) compounds producing imagewise a chemical species that can form development initiation points on and in the vicinity of the non-photosensitive silver salt of an organic acid,
- (ii) compounds that provide increase of developed silver grain density to a level of 200-5000% when added in an amount of 0.01 mol/mol of silver,
- (iii) compounds that provide increase of covering power to a level of 120-1000% when added in an amount of 0.01 mol/mol of silver, and
- (iv) compounds represented by any one of the following formula (1) to (3):

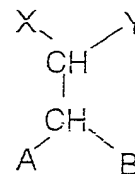
Formula (1)



Formula (2)



Formula (3)



wherein:

in the formula (1),  $R^1$ ,  $R^2$  and  $R^3$  each independently represents a hydrogen atom or a substituent, Z represents an electron withdrawing group, and  $R^1$  and Z,  $R^2$  and  $R^3$ ,  $R^1$  and  $R^2$ , or  $R^3$  and Z may be combined with each other to form a ring structure,

in the formula (2),  $R^4$  represents a substituent, and

in the formula (3), X and Y each independently represent a hydrogen atom or a substituent, A and B each independently represents an alkoxy group, an alkylthio group, an alkylamino group, an aryloxy group, an arylthio group, an anilino group, a heterocyclyloxy group, a heterocyclylthio group or a heterocyclylamino group, and X and Y or A and B may be combined with each other to form a ring structure.